

## Datasheet: MCA5953GA

**BATCH NUMBER 154523**

<b>Description:</b>	MOUSE ANTI BOVINE CD21
<b>Specificity:</b>	CD21
<b>Other names:</b>	CR2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC51
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	0.1 mg

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/25 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

#### Target Species

Bovine

#### Species Cross Reactivity

Reacts with: Pig, African Buffalo

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

#### Product Form

Purified IgG - liquid

#### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

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**Buffer Solution** Phosphate buffered saline

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**Preservative Stabilisers** 0.09% Sodium Azide (NaN<sub>3</sub>)

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**Carrier Free** Yes

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**Approx. Protein Concentrations** IgG concentration 1.0 mg/ml

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**Immunogen** Bovine (Friesian cattle) mesenteric lymph node cells

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**External Database Links** **UniProt:**  
[Q8HY44](#) [Related reagents](#)

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**Fusion Partners** Spleen cells from immunised BALB/c mice were fused with cells of the mouse NSI myeloma cell line

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**Specificity** **Mouse anti Bovine CD21 monoclonal antibody, clone CC51** recognizes the bovine homologue of the human CD21 cell surface antigen, a 145 kDa single pass type I membrane glycoprotein containing multiple [sushi](#) domains. CD21 is also known as complement receptor type 2 (CR2). In cattle CD21 expression is restricted to B-cells ([Naessens et al. 1990](#)). CD21 may be expressed on B-cells as either a long or a short form ([Pringle et al. 2012](#)).

Mouse anti Bovine CD21, clone CC51 demonstrates cross reactivity with porcine and provides a reliable marker for porcine B-Cells ([Sinkora et al. 2013](#)). In addition to clone CC51, clone CC21 ([MCA1424GA](#)) which has been demonstrated to recognise CD21 in a range of ruminant and other species is also available from Bio-Rad.

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul

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- References**
1. Sinkora, M. *et al.* (2014) The comparative profile of lymphoid cells and the T and B cell spectratype of germ-free piglets infected with viruses SIV, PRRSV or PCV2. [Vet Res. 45: 91.](#)
  2. Sinkora, M *et al.* (2013) Different anti-CD21 antibodies can be used to discriminate developmentally and functionally different subsets of B lymphocytes in circulation of pigs. [Dev Comp Immunol. 39: 409-18.](#)
  3. Tenaya I.W. *et al.* (2012) Flow cytometric analysis of lymphocyte subset kinetics in Bali cattle experimentally infected with Jembrana disease virus. [Vet Immunol Immunopathol. 149: 167-76.](#)
  4. Denham S. *et al.* (1994) Monoclonal antibodies recognising differentiation antigens on porcine B cells. [Vet Immunol Immunopathol. 43: 259-67.](#)
  5. Boersma W.J. *et al.* (2001) Summary of workshop findings for porcine B-cell markers. [Vet Immunol Immunopathol. 80: 63-78.](#)
  6. Naessens, J. *et al.* (1990) Characterization of a bovine leucocyte differentiation antigen

of 145,000 MW restricted to B lymphocytes. [Immunology. 69 \(4\): 525-30.](#)

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<b>Storage</b>	Store at +4°C or at -20°C if preferred.  This product should be stored undiluted.  Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA5953GA">https://www.bio-rad-antibodies.com/SDS/MCA5953GA</a> 10040
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR117...) [DyLight®405](#), [DyLight®488](#), [DyLight®800](#), [FITC](#)

### Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

### Recommended Useful Reagents

[MOUSE ANTI PIG CD14:FITC \(MCA1218F\)](#)

[MOUSE ANTI PIG CD4 ALPHA \(MCA1749GA\)](#)

[RAT ANTI HUMAN CD3:Pacific Blue® \(MCA1477PB\)](#)

[MOUSE ANTI BOVINE CD25:RPE \(MCA2430PE\)](#)

[MOUSE ANTI PIG CD3:RPE \(MCA5951PE\)](#)

[MOUSE ANTI PIG SLA CLASS II DR:FITC \(MCA2314F\)](#)

[MOUSE ANTI PIG wCD8 ALPHA:RPE \(MCA1223PE\)](#)

[MOUSE ANTI BOVINE MHC CLASS II DR:RPE \(MCA5656PE\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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